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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,809	09/07/2000	Anders Bergsten	192379US2PCT	6745

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

MIRZA, ADNAN M

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 09/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/581,809

Applicant(s)

BERGSTEN ET AL.

Examiner

Adnan M Mirza

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> . | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-<sup>14</sup>~~12~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Galaand et al (U.S. 5,495,479) and in view of Arrowood et al (U.S. 5,987,521).

As per claims 1,9 Galaand disclosed a method for routing of information packets by means of distributed routing protocols in just any network (col. 7, lines 53-64),

However Galaand did not disclosed in details characterized in that an External Route Manager (ERM) is utilized to effect a plurality of not distributed routing algorithms in said just any network as a complement to routing algorithms which are utilized by said distributed routing protocol.

In the same field of endeavor Arrowood disclosed that the route controller is use to calculate optimum routes of the messages originating at the node of Fig. 2. Controller can, for example, use updated information in network topology database to calculate the optimum network topology dated base to calculate the optimum route using an algorithm such as that described in afore-mentioned patent U.S. Pat No. 5,233,604. Once calculated, such optimum routes are stored

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locally at the node of Fig. 2 and used by route controller to add this route to the header of all the data packets to be forwarded to this destination (col. 4, lines 41-49).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have incorporated the route controller is use to calculate optimum routes of the messages originating at the node of Fig. 2. Controller can, for example, use updated information in network topology database to calculate the optimum network topology dated base to calculate the optimum route using an algorithm such as that described in afore-mentioned patent U.S. Pat No. 5,233,604. Once calculated, such optimum routes are stored locally at the node of Fig. 2 and used by route controller to add this route to the header of all the data packets to be forwarded to this destination as taught by Arrowood in the method of Galaand to reduce the latency in the network and increase the throughput of the network.

3. As per claims 2,10 Galaand-Arrowood disclosed characterized in that said ERM establishes at least one explicit route in said just any network which replaces the route which is determined by said distributed routing protocol (Arrowood, col. 6, lines 41-61).

4. As per claims 3 Galaand-Arrowood disclosed characterized in that said explicit route is upheld until it is no longer needed, or until it is no longer valid due to that an error has occurred (Arrowood, col. 5, lines 54-62).

5. As per claim 4 Galaand-Arrowood disclosed characterized in that said error is link error, error in computers, routers which uphold said explicit route (Arrowood, col. 4, lines 54-63).

6. As per claim 5 Galaand-Arrowood disclosed characterized in that when said explicit route no longer shall be used, concerned traffic reverts to following the route which said distributed routing protocol has selected (Arrowood, col. 8, lines 13-21).

7. As per claims 6,12 Galaand-Arrowood disclosed characterized in that when traffic reverts to following the route which said distributed routing protocol has selected, is secured that no routing loops arises, at which, if routing loops yet arise, they are detected and broken (Galaand, col. 11, lines 29-37).

8. As per claims 7,13 Galaand-Arrowood disclosed characterized in that said ERM operates according to the steps to: check that suggested explicit route is free from loops (Arrowood, col. 4, lines 41-49); check whether potential loops may arise and identify where such loops may arise(Galland, col. 11, lines 29-37; prevent the emergence of potential loops; detect errors along established, explicit route; break arisen loop (Galland, col. 10, lines 32-49).

9. As per claims 8,14 Method according to chracterized in that said just any network is an IP-network (Arrowood, col. 2, lines 43-55).

10. As per claim 11 Galaand-Arrowood disclosed characterized in that said ERMap is arranged in the machine which has functions to calculate explicit routes (Arrowood, col. 6, lines

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41-61), and said ERMrp is arranged in all routers which are involved in the explicit routes which are established via said ERM (Arrowood, col. 4, lines 41-49).

***Conclusion***

11. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (703)-305-4633.

12. The examiner can normally be reached on Monday to Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dharia Rupal can be reached on (703)-305-4003. The fax for this group is (703)-746-7239.

13. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-746-7239 (For Status Inquiries, Informal or Draft Communications, please label

"PROPOSED" or "DRAFT");

(703)-746-7239 (For Official Communications Intended for entry, please mark "EXPEDITED PROCEDURE"),

(703)-746-7238 (For After Final Communications).

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14. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Any response to a final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks Washington, D.C.20231


Or faxed to:

Hand-delivered responses should be brought to 4<sup>th</sup> Floor Receptionist, Crystal Park II,  
2021 Crystal Drive, Arlington, VA 22202.

AM

Adnan Mirza

Examiner

  
RUPAL DHARIA  
PRIMARY EXAMINER